



Political economy of planned relocation: A model of action and inaction in government responses

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ABSTRACT

Planned relocation has been shown to have significant impacts on the livelihoods and wellbeing of people and communities, whether the resettlement process is inclusive or coercive. For states, planned relocation represents risks to those communities but also to government investments and political legitimacy. Evaluations of relocations commonly focus on the risks and benefits of government interventions while overlooking the consequences of not intervening. Here we develop a conceptual framework to examine the factors that influence government decision-making about whether or not to undertake planned relocation of populations in the context of environmental change. The study examines planned relocation decisions and non-decisions by government agencies in West Bengal in India for communities seeking relocation due to coastal flooding. It focuses on three localities facing river erosion losing significant land areas in small islands and communities where populations recognize the need for public intervention, but where there has been a diversity of responses from the state authorities. Data are derived from interviews with key respondents involved in planning and implementing relocation and with residents affected by those government decisions ($n = 26$). These data show that government action is explained by a combination of risk aversion within political systems to avoid perceived negative consequences, and a lack of government accountability. The empirical cases demonstrate the uneven application of action and inaction and the consequent uneven distribution of potential outcomes on populations. The study suggests that while there may be a growing demand for planned relocation in places affected by environmental change, its implementation is likely to be uneven, with profound socioeconomic implications for those living in such localities.

1. Introduction

One key responsibility of states is for the protection of their vulnerable citizens. Governments everywhere have intervened through spatial planning to ensure that populations are not exposed to identifiable risks and hazards. In some cases, and for multiple political reasons, governments intervene and encourage or coerce communities and settlements to move for the perceived public interest and for their own private good. Governments have frequently induced individuals and communities to move location to make way for infrastructure development, dams and roads through compulsory purchase of land and places of residence. There is a significant evidence base on such involuntary resettlement practice. It focuses on the legitimacy of such actions and the limits of state power, on the human rights of those being resettled with respect to their governments, and on the experience and

outcomes of being resettled (Cernea and McDowell 2000).

With increasing environmental risks through global change processes such as climate change, planned relocation (often also referred to as resettlement) is now widely discussed as a necessary or potentially effective intervention for vulnerable communities (McAdam and Ferris (2015); Hino et al., 2017). But the relationship between climate change and planned relocation is widely contested: previously planned development strategies by governments that involve resettling populations, are themselves now increasingly justified and rebadged as climate change adaptation (Barnett and O'Neill 2012; Kothari 2014; Arnall 2014). At the same time, development imperatives of urbanization and infrastructure, that include bio-energy and hydro-electricity projects themselves lead to populations being involuntarily displaced and relocated by governments despite protestations and resistance (Dabelko et al. 2013). Much emphasis on planned relocation focuses on the

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outcome for residents, which is directly affected by the legitimacy and levels of agency in the process. Bronen and Chapin (2013), and Sipe and Vela (2014) show that maximum transparency and direct engagement with communities is a pre-requisite for maintaining community coherence and sense of agency. In many circumstances, relocation leads to decline of well-being and livelihood for those resettled, not least when communities are dispersed (Kura et al., 2017).

Given the risks to states in terms of the legitimacy of their actions, and the risks to populations being displaced as a result of environmental changes, how do governments decide to engage in the contested spaces of actively planning for relocation? There are, of course, international protocols and regulations to guide displacement and resettlement responses (Tilt et al., 2009). These guidelines and protocols emerged due to a response to a long history of breaches of human rights associated with development-related forced displacement and planned relocation (Warner et al., 2013; Baird and Shoemaker 2007). However, international protocols are known to be a weak instrument when contending with political interests of individual states. The outcome of decisions on whether to intervene and undertake planned relocation is often ad hoc responses ranging from full scale movement of communities to no investment or intervention at all. The full range of responses is apparent, yet the evidence base from the political science of planned relocation focuses almost exclusively on those situations where interventions actually occur (Warner et al., 2013). Hence there is less evidence on what influences governments in their decisions on whether to support communities who may be calling for relocation, how so-called non-decisions come about, and the barriers to action for those governments and affected communities. In essence, government inaction results from an interplay of what agencies desire to do, what they are obliged to do, and what populations demand from them: these are the core of the conceptual model of this study.

This study therefore seeks to analyze the factors that influence governments in deciding on whether to support planned relocation for communities at risk, and to explain in particular how non-decisions come about in circumstances of environmental change. In order to answer these questions, we adopt a political economy approach to develop a conceptual model that examines uneven government responses for planned relocation in terms of incentives for decision-making, the decisions themselves, and the consequences of decisions on affected communities. Decisions whether to undertake planned relocation involve the exercise of power by both governments and communities: by power we mean the exercise of formal and informal authority to determine the allocation of resources and influencing the legitimacy of actions (Morrison et al., 2017). Communities may be at risk from displacement associated with climate change: yet some communities demand such interventions while others ignore such risks or actively resist such interventions.

The deductive conceptual model is developed with reference to political economy theory and to experience of planned relocation globally. In summary, the political logic of intervening to relocate populations is strongest when risks to political systems themselves are manageable and predictable, and weakest in the face of uncertainty that induces risk averse behaviours within political systems. The conceptual model is tested through examining cases of government action and inaction in Bengal in India, showing that both action and inaction are present and observable, and that in those cases concerns over government risks and legitimacy appear to be driving the uneven distribution of action.

2. Government action and inaction

This section examines government inaction in the context of social contract theory and policy action drawing on models from political economy and public administration and, in the environmental context from spatial planning and disaster management. Much of political economy is devoted to explaining the scope and limitations of state

power and the processes by which state interventions are legitimate and legitimized. At its core, political economy suggests that the underlying motivation for state intervention is maintaining and improving their own legitimacy (Hindess 1984; Jaeger et al., 2013) and that social and economic interventions are attempts to maintain or extend that power (Scott, 1998). Political ecology is the application of those ideas to resources and environment: it similarly focuses on the distribution of power and authority over environmental resources (Forsyth, 2004). In this study we therefore draw on concepts in political ecology and environmental justice on the nuance and context of political, economic and environmental processes at multiple scales, recognizing that scale itself is part of political discourse and construction (Birkenholtz, 2012; Robbins and Bishop, 2008). Our theoretical approach focuses both on social outcomes (the distribution of resources and of environmental risks) and the social processes that create the landscape in which responsibility and power resides, and in which decisions are legitimized (Morrison et al., 2017; Agrawal and Perrin, 2009; Ribot, 2014). In adopting this theoretical framework, we focus here specifically on how divisions are made and how action and inaction are undertaken.

How states choose to intervene depends on context, notably the type of political regime and ideological preferences for state and market. In the context of environmental risks and hazards, it has widely been demonstrated and documented that governments are seen to be derelict in their duty, and hence risk their legitimacy, if they do not protect vulnerable populations (Pelling and Dill, 2010). Social contract theory has been used to explain how the demand for action to avoid harm to citizens is manifest, and what can happen to states when they do not fulfill their implicit social contract of protection. Pelling and Dill (2010) document diverse historical cases where major events such as earthquakes, floods and nationally-important events have rocked governments and created circumstances for revolutionary change to established orders.

Policy inaction is a result of systematic under-reaction to external circumstances with policy processes, either through under-estimating the risks of not acting, or through inertia and persistence of status quo means of making decisions (Maor, 2014). At their core, research in public administration shows that governments explicitly or implicitly weigh up the reputation and transaction costs of interventions. Reputational considerations include how interventions affect the likelihood of electoral success, how interventions fit within existing state priorities, and the opportunity cost of interventions against other government interests. In crisis management situations in particular, governments seek actions and interventions that bolster legitimacy and ‘attract universal or near universal support, and attract virtually no opposition’ (McConnell, 2011 p.70). Inaction can be a manifestation of risk aversion in order to avoid risks to political reputation (McConnell, 2011, McConnell and T’Hart, 2014, Howitt and Wintrobe, 1995). In crisis situations, inaction may in fact be institutional paralysis: institutions are overwhelmed by a crisis such that their institutional mechanisms are rendered ineffective (McConnell and T’Hart, 2014).

These principles of action and inaction are all observable in the area of spatial planning and specifically in the context of potential relocation. During the 2011 flooding in Bangkok, for example, national and local authorities did not act to direct flood waters away from poorer communities: by doing so the government effectively prevented flooding of wealthier Bangkok suburbs (Marks, 2015). Hurricane Katrina provides an example of how government systems engage in so-called defensive avoidance, thereby failing to assist some disadvantaged communities from recovering the deceased from the rubble (Thompson et al., 2009). The incentives for inaction are hard-wired into many political systems: Healy and Malhotra (2009) show that US voters reward politicians for disaster relief efforts but not for preparedness such that governments at all levels have low incentives to preemptively reduce disaster risk.

Likewise, history and political stability shapes incentives and disincentives for state intervention related to environmental displacement

and planned relocation initiatives. A history of social unrest and resistance may leave a government hesitant to undertake sensitive interventions. In India, land acquisition and resettlement are highly sensitive politically with a long history of violent resettlement processes linked to development projects (Bala, 2006; Ren, 2017). This suggests that governments are wary of the social costs of relocation, particularly in the context of election cycles.

The extent to which states intervene in decisions to resettle displaced populations is also determined by the strength of non-governmental institutions and civil society. Following the 2010 earthquake in Haiti, up to 9000 non-governmental institutions were active in Haiti. Government capacity was already weak, with long standing social unrest and low government revenue to support state building, and became substantially weaker following the earthquake where many government buildings were destroyed (Zanotti, 2010). Local and international aid organizations played such a dominant role in the recovery of Haiti that state government institutions were relegated to a relatively marginal role, albeit with costs to state legitimacy (Brattberg and Sundelius, 2011; Zanotti, 2010).

3. A conceptual model of planned relocation action and inaction

Applying explanations for government action and inaction, we examine the decisions and outcomes surrounding planned relocation. Governments are faced with institution-level incentives and disincentives to act when communities and settlements are at risk from inundation or being rendered uninhabitable (Wilmsen and Webber, 2015). We refer to these deliberate interventions as planned relocation (following Warner et al., 2013). When agencies act to relocate populations facing environmental risk, there are diverse outcomes both for the legitimacy of the state and for the relocated communities. But where no intervention occurs, communities face ongoing risks and outcomes vary widely. These elements are captured in a conceptual model in Fig. 1. By a conceptual model we mean a representation that seeks to clarify system boundaries and offer an inclusive description of the relevant processes of a phenomenon (Heemskerk et al., 2003). The model is deductive in nature, derived from theory and available evidence on relocation associated with development projects and other reasons (Wilmsen and Webber, 2015). The model suggests that

decisions to act or not act on relocation initiatives (middle section) are driven by underlying political determinants (upper section), leading to outcomes for the populations involved (lower section).

Fig. 1 seeks to demonstrate the incentives and disincentives for government action and inaction in the context of environmental risks that may require settlements to move. The determinants (upper section) involve both accountability and attitudes and aversion to risk in the political systems. Often communities themselves demand interventions and actions, while in other circumstances, communities find the prospect of relocation unacceptable and resist such moves and lobby for greater protection in situ (Marino, 2012; Wilmsen and Webber, 2015). The pathways in Fig. 1 demonstrate diversity of potential government responses and the impact on outcomes this can have on communities affected by environmental change. Hence the decisions taken (middle section) are determined by parameters that represent incentives and disincentives to act (upper section), leading to significant outcomes and constrained choices for communities (lower section).

The focus of Fig. 1 is relocation associated with environmental risks such as land erosion, saline intrusion, or desertification that have reached thresholds making habitation and economic livelihoods potentially unviable (Szabo et al., 2016). The top panel shows that government accountability creates a set of institutional incentives for action and inaction including those associated with economic, political, credibility and reputational gains that can solidify authority (Besley and Burgess, 2002; Levinson, 2000). Inaction on relocation, by contrast, results from aversion to perceived risks that the institutional disincentives (top panel) is an exercise of power with significant consequences for the social wellbeing of populations affected by environmental change. Decisions to act on relocation involve significant resources, and challenge the legitimacy and ability of states to alter the residences of citizens in non-coercive ways.

Where governments decide not to act to relocate populations, evidence from studies of migration and environmental risks demonstrate a range of potential outcomes, summarised in the lower panel of Fig. 1. First, populations facing these environmental risks may be limited in their mobility choice and effectively trapped in these places (Black et al., 2013). Crossing environmental thresholds have been shown to push communities into deprivation, while also limiting opportunities to escape from poverty. Those who wish to move but have limited access

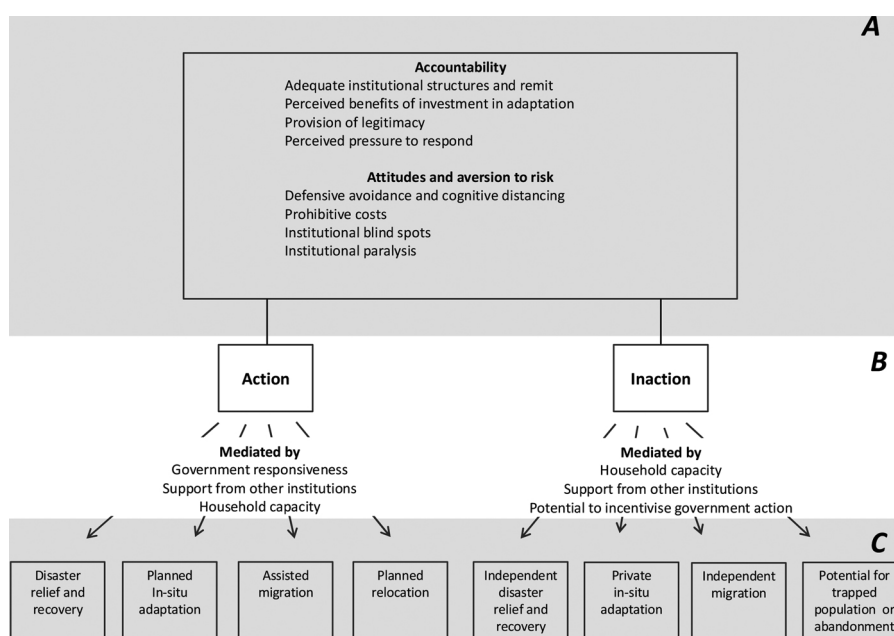


Fig. 1. Conceptual model of uneven government responses to communities threatened by environmental change. Upper panel A: determinants of decisions; Middle panel B: decisions; Lower panel C: Outcomes for communities.

Table 1
Respondent type in sample of actors and stakeholder in resettlement action, West Bengal.

Stakeholder type	Number of Participants
State government (West Bengal)	3
District government (South 24 Parganas)	2
Sub-district government (Sagar Block)	2
Non-governmental organisations	2
Residents experiencing resettlement	8
Research and advocacy	9
Total	26

to the resources and networks to escape deteriorating environmental conditions may be unable to migrate, reinforcing conditions of vulnerability (Black and Collyer, 2014; Milan and Ruano, 2014; Logan et al., 2016).

A second common outcome from inaction around relocation, indicated in the right hand pathway in Fig. 1, is, in effect, increased individual or community-level abandonment of localities. In the absence of planned government actions, the decision to move is made to preserve life from sudden onset disasters or based on the capacity to maintain livelihood and socio-economic wellbeing under progressive loss of ecosystem services (Renaud et al., 2011). The value of residential properties and value of land are affected by proximity, frequency, intensity of risks of damage. Areas that are marginalised receive disproportionately lower public investment. Households may persist in vulnerable areas awaiting government action, hoping land values will be restored (Chamlee-Wright and Storr, 2010). But ultimately whole communities may decide to abandon exposed areas. McLeman (2011) compiled and reviewed 246 cases settlement abandonment, and found common progressions of multi-stage process of increasing vulnerability, transition from population increase or stability to instability and population decline, and growing out-migration driven by perceptions of state abandonment.

In summary, the conceptual model therefore summarises a range of determinants, decisions and potential outcomes. The distribution of these is an empirical question, not least because each place and context has antecedent decisions and history. Environmental justice and political economy approaches highlight, for example, how decisions are bound up in discrimination and uneven treatment of marginalised groups, on racial, ethnic or other grounds (Ribot, 2014). But the model captures in a deductive manner, the shape and scope of planned relocation decision-making.

4. Research design, methods, and data

4.1. Researching presence and absence of action

We examine the landscape of relocation across one major jurisdiction of West Bengal; a region where there is a history of significant environmental displacement and government resettlement interventions. The research is focussed on Sagar Block, a sub-district in the Indian Sundarbans within West Bengal state, where government responses to displacement have been uneven and communities have experienced a diversity of outcomes. The region has experienced significant displacement due to land use change and directly from changing environmental risks such as salinity and erosion. In addition, in each of the cases selected, there are prior discussions and perceived demand for action among the resident populations. Government responses to displacement have been diverse, with relocation initiatives being used in some instances and avoided in others. Displacement is used here to focus on the involuntary and unforeseen movement of people from their place of residence due to environmentally-related impacts on property and infrastructure.

We collected data on the politics, worldviews and perceptions of

actors that shape incentives and disincentives for government interventions in Sagar in relation to planned relocation. Interview themes include perceptions by key actors of their motivations, constraints and decision-making processes on relocation decisions and non-decisions by government agencies; the perceived power dynamics associated with these decisions; and the implications government actions have had on the mobility and immobility of populations. We conducted 26 in-depth semi-structured interviews with representatives from state and non-state actors. The interviews were conducted in February and March 2016 in Kolkata, and in Sagar Block. Three small communities in Sagar Block are the focus of this research: Ghoramara, Beguakhali and Dhablat.

Respondents are representatives of agencies involved in planning and implementing relocation as well as local residents affected by government decisions (Table 1). Agency participants were purposively selected to represent the various tiers of government involved in relocation planning up to the State level, including agencies involved in disaster management, environment planning and social welfare. Federal government were not included, as they have limited involvement in relocation planning in West Bengal (Löfgren 2016). Participants were sent a letter inviting them to participate in the research and a follow-up phone call or visit was made to arrange interviews.

The sample of respondents included three in-depth interviews with residents of settlements directly involved in being resettled. These were recipients of formal relocation programs and residents who had been displaced by flooding and received little or no government support. Further themes of these interviews included the nature of environmental risks such as embankment breach events, flooding and erosion; the experience of government agencies and NGOs in supporting those directly displaced; expectations and demand for government support; and the role of autonomous versus government capacity and capability for implementing successful resettlement. The interviews with residents were used in a corroborative way to give perspective on the government decision-making process. All participants in the research, both residents and agency representatives, partook voluntarily and provided written or oral informed consent at the start of each interview. Interviews typically lasted between 60–90 min and were conducted in English and Bengali. In line with ethical practice, direct quotations here are not directly attributed to individuals or their organisations.

Interviews were digitally recorded, transcribed, translated, and analysed. The data was thematically analysed with an initial set of codes relating to organisational policy and practice: organisational priorities, activities, funding sources and institutional barriers; organisational networks of policy and practice; and political and legal contexts for decisions related to displacement and planned relocation, including where practice deviated from policy documentation. The second set of codes relate to the specific case study sites and the experience of households: environmental events and their impacts on household livelihoods and wellbeing; displacement and relocation support received and its impacts on household livelihoods and wellbeing; mobility trajectories following displacement including planned relocation, migration and immobility; local conditions which might affect policy delivery (for example specific land tenure arrangements, popularity of opposition party in certain areas); local trust and expectations in government; and perceptions of the future in each of the case study sites, including awareness of climate change risks.

Documentary sources of policies and legislation complemented the interview data. These included legislation relevant to planned relocation and displacement (such as land acquisition acts and coastal zone regulations), disaster planning reports, climate change adaptation planning documents (such as national and state Action Plans on Climate Change), and agency mission statements to understand organisational responsibilities and priorities. These documents were analysed to understand the political and policy context in West Bengal, including how it has changed over time, and to identify institutional incentives for displacement and relocation planning.

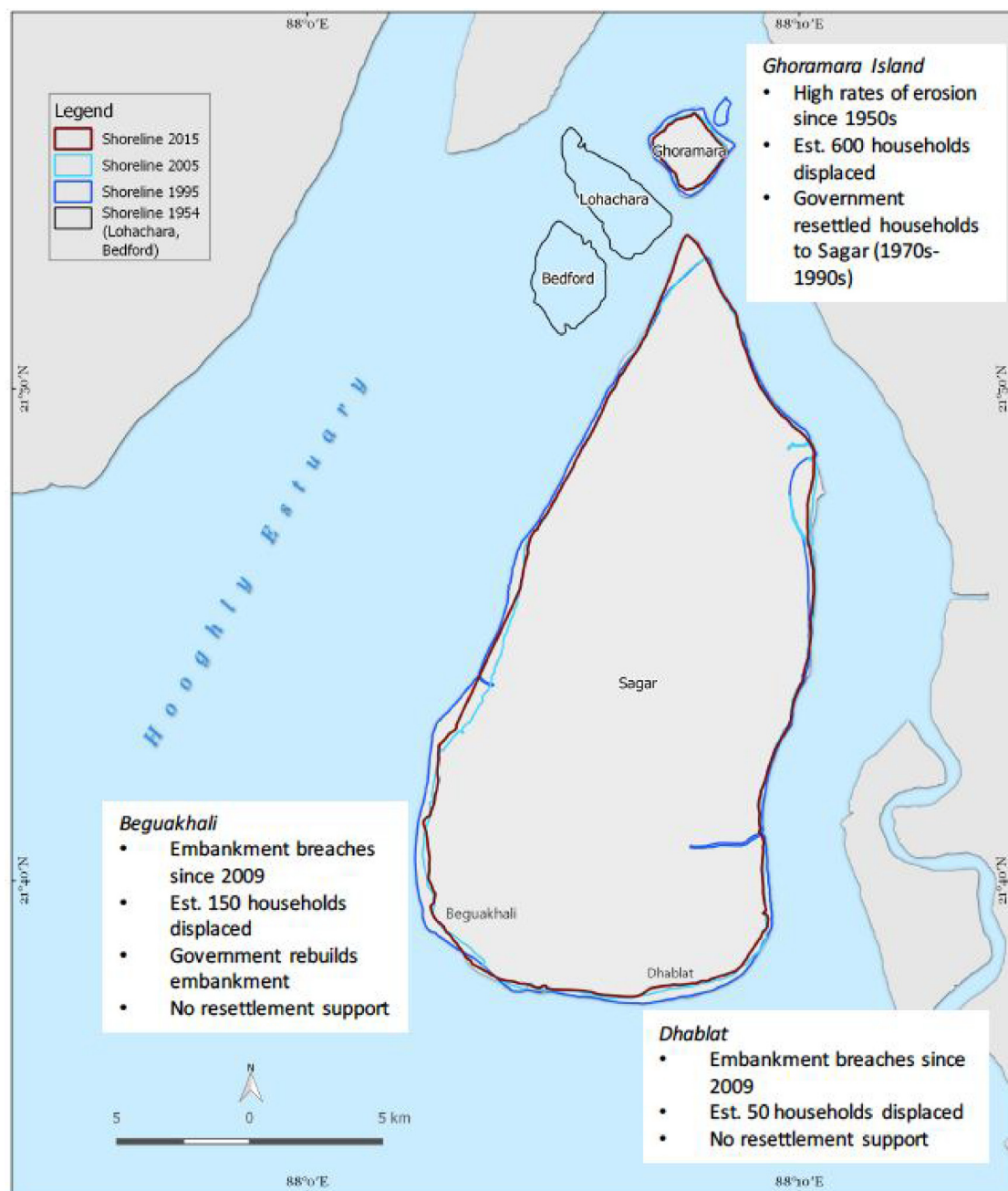


Fig. 2. Sagar Block showing each of the study sites with details on the number of households displaced and subsequent government responses.

4.2. Sagar block in context

Located on the south west edge of the Indian Sundarbans, Sagar Block is exposed to coastal flooding, storm surges and cyclones, leading to high rates of erosion and salinisation (Ghosh et al., 2014). Coastal erosion has reduced the land mass of one Island (Ghoramara) by about 70 percent since the 1920s, with its neighbour Lohachara Island lost to erosion in the Hooghly River in 1991 (Ghosh et al., 2014). Sagar Island is also eroding, with a 2.18 percent rate of land loss recorded over the 2001 to 2008 period (Hazra and Samanta, 2016). The land loss has been attributed to flooding, cyclone activity, mangrove loss, and sea level rise, with climate change expected to play a greater role in future (Nandi et al., 2016). Loss of land has degraded ecosystems, affected the livelihoods of those dependent on natural resources, and has been associated with high rates of out-migration and displacement (Ghosh et al., 2014). The exact number of people displaced from erosion and

flooding is unclear from administrative records but estimated to be around 4000 from Ghoramara and Lohachara since 1971 (Ghosh et al., 2014).

The localities of the study are shown in Fig. 2. Lohachara and Ghoramara Island are sites of sustained government action to formally resettle those displaced by erosion to Kamalpur, Bankim Nagar and Gangasagar. In Beguakhali the government has not formally resettled displaced households but has invested in large-scale coastal embankments. And in Dhablat there has been an absence of government action.

The communities living in Sagar and Ghoramara Islands are particularly exposed to these environmental changes and have limited capacity to adapt without external assistance. The Indian Sundarbans region, within which Sagar Block is situated, is a marginalized rural area and with low levels of investment due to the area's exposure to cyclones and flooding (Mukhopadhyay, 2009). Human development measures across the Indian Sundarbans remain low with 34 percent of

the population below the poverty line, 59 percent without access to clean drinking water, and 47 percent living with some food shortage (Centre for Sciences and Environment (CSE) et al., 2016). Sagar Island enjoys greater infrastructure than other islands in the Indian Sundarbans due to the Kapil Muni temple which attracts Hindu pilgrims. This tourism attraction has brought investments in asphalt roads and electrification however the majority of the roads on the island are paved only with bricks and mud embankments, and people rely on tube wells for drinking water and irrigation (rather than piped water). Thus, the overall capacity of Sagar and Ghoramara communities to adjust to environmental change is limited.

5. Results: diverse cases of action and inaction

5.1. Ghoramara and Lohachara: example of action for planned relocation

In 1977 the government of West Bengal declared Ghoramara and Lohachara Islands withdrew funding for support and services because of the high rates of erosion on both islands (declared as a 'no man's land' in policy documents). It demonstrated that the government had little confidence in the long-term viability of the islands and little consideration for the populations still living there. The local response was one of confusion and despair as people assessed their options.

"When we heard of the [no man's land (government decision to withdraw investment and services)] announcement we thought it was our bad luck. What else could we have thought? We thought we would be resettling in different places on our own as nothing. We would get dispersed in many places. We didn't have any money to buy land so that's why we would have had to settle anywhere, even if it meant that we'd have to live on footpaths. One after the other everything got breached and nothing was left. At that time we used to eat with whatever little we used to earn." (former Ghoramara resident, int9)

Previous to 1977, the conservative Government of West Bengal had no concrete plan to relocate the people from eroding islands of Sundarban. With the change of government that took place in that same year, the Communist Party introduced a long-term strategy to resettle Ghoramara and Lohachara residents Sagar Island. Sagar Island was selected as it was proximate, within the same jurisdiction, and there was land available for resettlement. The relocation policy came at a time in which the new Communist Party, through the newly elected local self-government of Sagar Panchayat Samity in 1978, was establishing its legitimacy and popularity through land reform commitments (Löfgren 2016). The resettlement program was sustained throughout the period that erosion continued to affect Ghoramara residents and during the time Lohachara eroded completely.

Lohachara residents were provided land and often housing in the first phase of the relocation plan, however entitlements reduced over time as available public land in Sagar reduced. The reductions in entitlements also coincided with broader economic decline in the state of West Bengal which affected government spending. This meant that there were equity issues in the distribution of relocation entitlements temporally:

"When we had first arrived we were given more land [3 bighas – equivalent to 0.4 ha] and the ones that arrived later were given less land. The ones who came later got 2.5 bighas and even 1.5 bighas [0.2 ha]. But what can they [the government] do? There is no land left and they are unable to give it." (former Ghoramara resident, int12)

The relocation process was not easy for those displaced from Ghoramara. The land households were resettled to was saline and unable to be cultivated in the early years:

"When I had first come here this place looked like a desert with only one tree... no embankment was constructed here. We had to raise the plinth of the house as the water from high tide used to enter our lands. I could cultivate the land only after 15–18 years." (former Ghoramara resident, int12).

There were stories of tension with host communities in Sagar Island

"forcefully capturing" land put aside for relocation (government official, int18) and of Muslim settlers being ostracized and prevented from using shared resources such as tube wells. One government official described the settlers as "a new group of poor" as they were relocated to areas without access to fishing to maintain their livelihoods and with far reduced land allotments than they had owned in Ghoramara, leading to "severe stress" (government official, int18). Despite these hardships, respondents maintained that they had few alternatives when they were displaced by erosion and were grateful for the entitlements they had received from the government at the time. Most interviewees described how they now felt integrated in Sagar and that they would not return to Ghoramara even if it were possible.

Applying this example to the conceptual framework proposed in this paper, the relocation of Ghoramara and Lohachara is an example of sustained government intervention, where the incentives for government action aligned with community needs. Specifically, it was in the interests of the new Communist government to demonstrate its commitment to land redistribution and social welfare in its early years of power. This helped establish the new government's legitimacy but as time wore on this incentive diminished (as did available land for relocation) and with it relocation entitlements diminished.

5.2. Beguakhali: example of action through in-situ adaptation

Displacement in Beguakhali demonstrates a very different government response; there has been no relocation support to date and instead a focus on short-term disaster relief and long-term investments in coastal protection infrastructure. Repeated breaching since cyclone Aila in 2009 has reduced embankment stability in Beguakhali and further afield in Dhablat (Irrigation and Waterways Department, 2014). The embankment in Beguakhali was particularly affected:

"150 plus households there have lost their land, their betel vine sheds, their house, everything they have lost and most of them have shifted to another place, [those] who could buy land in other villages while some of them are living on embankments which were constructed by the government. They are staying there in tarpaulins." (Government official, int15)

According to interviews, those displaced were provided basic relief (food, water, tarpaulins to build shelter) in the early weeks following the embankment breach. The decision to build a large-scale embankment was not announced until later. This affected household decisions to stay or leave the village, with some households migrating early and others deciding to stay once they heard about the proposed development.

"[When the embankment breached] we had lost all hope... We had thought of migrating to Kolkata but when we saw that new embankments were being constructed, we thought, let's stay and see what happens. We have decided to leave our fate to God." (Beguakhali resident, int13)

The embankment construction was primarily motivated by the Government of India's decision to develop a deep-sea port in Beguakhali for the transport of coal and iron ore (Kolkata Port Trust et al., 2018). First considered by the Kolkata Port Trust in 2002, the decision to develop the port was publically announced in 2010 but construction of the embankment did not start until 2015, such that residents were displaced without knowing whether or not the embankment would be repaired. The embankment construction forms the early stages of the development and is the largest and most technologically advanced embankment construction in Sagar Island (see photo on the left of Fig. 3). Around 2000 acres of land is expected to be acquired for the port but this process has not yet started (Kolkata Port Trust et al., 2018), leaving residents uncertain about their future in the village and the value of remaining properties.

The example of Beguakhali demonstrates government's tendency to act conservatively, delaying or avoiding relocation decisions. Relocation support has not been provided, and the only action taken



Fig. 3. Large-scale embankment construction in Beguakhali (left). Remaining households in Dhablat unprotected by embankment (right).

has been in-situ adaptation that aligns with broader development goals – in this case the embankment construction. The government's lack of support for those displaced can be regarded as a delay tactic. With an impending land acquisition process on the horizon, the government has resisted resettling the 150 displaced households. This has left those households in a precarious situation. Those who had the capacity to migrate mostly did so before finding out about the embankment construction. Remaining households are holding on to their properties in the hope that the port development will increase the value of their land, but they are caught in a state of limbo as they do not want to invest in rebuilding their homes lest it be acquired by the state, nor leave should they then lose out on possible compensations for land acquisitions related to the port (see photo on the right of Fig. 3).

5.3. Dhablat: example of government inaction

The settlement of Dhablat, ten kilometers east of Beguakhali is an example of inaction. Like Beguakhali successive embankment breaches in the years following cyclone Aila in 2009 led to the displacement of around 150 households (Irrigation and Waterways Department, 2014). Displaced households were provided with basic provisions (food, water, tarpaulins) as per the guidelines in the Disaster Management Plan (South 24 Parganas District, 2015). According to interviews with local NGOs and residents there was no additional support provided by government or NGOs. Similar to Beguakhali, the flooding has left the land saline such that agricultural land is no longer cultivable.

In contrast to Beguakhali, there has been no embankment reconstruction in Dhablat to protect those residents who have been displaced (see photo in Fig. 4). A small brick embankment has been consolidated by the Irrigation and Waterways Department but this is 100 metres inland from the households affected by the Dhablat flooding. The department's decision to consolidate the inland embankment rather than rebuild the coastal embankment is consistent with the Coastal Zone Regulations where there are no social provisions or consultations required in deciding on the placement of embankments (Ministry of Environment and Forests, 2011). As a result, king tides flood the affected community regularly:

“[When the tide waters come in] we take refuge on the beds or other raised infrastructure... It enters the house at almost waist deep... We suffer a lot when this happens.” (Dhablat resident, int19)

In response to the displacement and ongoing flooding, many households with the capacity to do so have migrated away from Dhablat:

“There were many families residing here [around 150 households] ... They have all moved to the interior part of the island, those who could afford to buy small bits of land... We did not get any support from the government. Not even a place to reside during this time of crisis. If we want to move in another location, the people there are objecting. (Dhablat resident, int19)

Those households that remain in Dhablat (around 30) are an example of a trapped population that cannot afford to leave:

“Earlier, we used to cultivate rice. We also had vegetable gardens. Right now there is nothing done here... What should we do? Unless embankments are constructed and we can buy land, we are unable to leave this place... Give us land anywhere else to settle... We would work hard and earn our living... if we are given land elsewhere, we would leave this place... I would live there and not return to this place.” (Dhablat resident, int19)

The Dhablat example demonstrates what can happen where there is a lack of incentive for government action. The remaining population is small such that it does not incentivize government action as was witnessed in Lohachara-Ghoramara where around 4000 people were displaced. There is little government interest in developing Dhablat; it does not provide the deep coastal channels that made Beguakhali a good site for a port development. The affected population of Dhablat is highly marginalized and has limited capacity to adapt independently nor resist government inaction. The marginalized nature of the community could support the case for providing the population with additional government support but, taking a cynical stance, it also means that the community is unlikely to put pressure on the government for additional support, providing little reason for government to invest in the community. The result is a process of slow community abandonment where social services and infrastructure have broken down and those who still live there lack the ability to move if they wish, in effect becoming trapped population (Black and Collyer, 2014).

6. Analysis: explaining relocation action and inaction in West Bengal

The examples of government action described here are Ghoramara (relocation) and Beguakhali (in-situ adaptation). Dhablat, by contrast, is a decision for inaction. The data compiled from the three cases illustrates the various principal determinants shaping government response to environmental displacement consistent with the conceptual model. The outcomes and pathways in the model (lower panel Fig. 1) are present across the experience and examples of relocation action and inaction in West Bengal. However, the three cases examined here are limited by contextual factors. Nevertheless, we show that while the scale and geographic marginalisation of Dhablat is important, these factors interact with the political economy principles of accountability and risk aversion. In each case there was a local demand for relocation, but in only one of the three cases has that demand been realised to date. The documented perceptions of key actors in this process point to the choice between action and inaction principally being an outcome of lack of accountability and due to perceived risk aversion.

6.1. Accountability for decisions on action and non-action

The accounts from all the cases, consistent across respondents, suggests that there is little accountability for government agencies should they choose not to support displaced populations such as those in those in Beguakhali and Dhablat. This lack of accountability was

articulated by some respondents as an institutional blind spot on planning for long term displacement in West Bengal. Legislation and policies targeted at managing disasters overlook long-term displacement. The National Disaster Management Act defers much of the design and content of Disaster Management Plans to the district level (Ministry of Law and Justice, 2005). In 24 South Parganas District, where Sagar Island is situated, there is a Disaster Management Plan, but it focuses on immediate relief in the event of a natural disaster with no discussion about meeting the long-term needs of those displaced. The National Calamity Contingency Fund, coupled with the West Bengal Calamity Relief Fund, can provide additional financial support for disaster affected areas but again ‘only for immediate relief and rehabilitation’ (Ministry of Finance, 2016). This calamity relief funding is only distributed in cases of ‘severe’ environmental events and the recent displacement occurring in Sagar Island did not warrant calamity relief funding.

Just as the disaster legislation and policies overlook displacement, institutional settings for relocation and displacement overlook natural disasters. The National Policy on Resettlement and Rehabilitation caters for those displaced due to development projects but not from natural disasters (Ministry of Rural Development, 2007). The District Rehabilitation Office which sits under the State of West Bengal’s Department of Refugees and Resettlement is responsible for resettling refugees not internally displaced persons (South 24 Parganas District, 2015). The Right to Fair Compensation and Transparency in Land Acquisition, Rehabilitation and Resettlement Act (Ministry of Law and Justice, 2013), which is currently being contested in the courts, outlines relatively generous provisions for property compensation plus entitlements for livelihood losses following public acquisitions of private land. However, the Act is designed to compensate populations resettled due to large-scale development projects. In the case of displacement from natural disasters, the government is not obliged to acquire affected lands and if there is no public acquisition there is no requirement for the government to provide displaced populations any compensation under the Act. This means that people displaced by natural disasters are largely unprotected by the Resettlement and Rehabilitation Act. This is not good news for those households in Dhablat, but households remaining in Beguakhali may receive compensation associated with the land acquisition linked to the port development in years to come.

There are no special welfare provisions for those displaced by natural disasters, only the standard provisions available nation-wide. Schemes include the Mahatma Gandhi National Rural Employment Guarantee (which provides at least one hundred days of paid unskilled manual work every year to households), food and fuel subsidies for households below the poverty line, and a range of pensions for people below the poverty line who are elderly, disabled or widowed. These schemes provide an important safety net and were discussed by respondents, however, they do not provide for the specific housing and relocation needs of people who are displaced.

Embankment protection regulations are present but authorities are not required to consult with local communities leading to poor social outcomes. The Coastal Regulation Zone (CRZ) rules establish what developments can occur within 500 m of the coastline. Since 2011, consultation with local communities affected by embankment construction and maintenance has been encouraged (Ministry of Environment and Forests, 2011), however there is no explicit monitoring of consultations and the State Irrigation and Waterworks Department can construct embankments with little consideration of community needs; indeed, this is the case for households in Dhablat where embankment investments are occurring inland from the village. Furthermore, the CRZ rules stipulate that households ‘will not be relocated if the dwelling units are located on the seaward side of the hazard line’ and that in this case the State Government will provide the usual safeguards from natural disasters (Ministry of Environment and Forests, 2011, p.18). As explored already however, the safeguards for households affected by natural disasters in the State of West Bengal are

limited to immediate relief and standard welfare provisions so again the long term needs of displaced communities are likely to be overlooked.

6.2. Risk aversion

A second principal reason for the distribution of action and inaction (Fig. 1) is, in effect, governments choosing what they perceive to be least risky pathways. Land acquisition and resettlement are central to West Bengal politics such that government agencies are sensitive about promoting relocation. Following the collapse of Indira Gandhi’s federal government in 1977, the Left Front (a coalition led by the Communist Party) held power in the State of West Bengal from 1977 to 2009 and brought significant land reform, redistributing farmland into smaller landholdings (Löfgren 2016). After the Communist Party’s initial success in the 1980s, economic decline in the 1990s led to controversial land acquisitions and resettlements in rural areas to support the development of special economic zones (Löfgren 2016). Several of these land acquisitions led to violent protests by rural landowners. The Nandigram protest in 2007 was met with police violence leading to the deaths of at least 14 locals (Bhattacharya, 2007, Banerjee et al., 2007). This along with similar events in Singur in 2008 led to a rapid decline in the popularity of the Communist Party (Ren, 2017). The Trinamool Congress Party, vehemently opposed to public land acquisitions, won the 2009 election in the State of West Bengal and remains in power today. Given their election win was shaped heavily by their opposition to land acquisitions, it is not surprising that the current government is hesitant to resettle communities, even if in response to natural disasters.

There remains considerable political instability around election times in West Bengal as the Trinamool and Communist parties compete for votes (Löfgren 2016). This has led to short term electoral opportunism whereby political parties may use hazard events as a tool for political point scoring, but fail to address environmental risks in the longer term. As one government official explained:

“the government provided some monetary relief [to a different administrative block]... the relief was arranged because this year was an election year... it is like instant coffee. The election is there so we [the government] will provide some benefit just now, not for a long term vision... so you will not have such type of [long term] planning so that the people of Sundarbans can fight the environmental hazards” (government official, int15)

One interviewee in Dhablat noted the dynamic nature of institutional incentives for action, not least with election cycles:

“Now that the election is approaching, political parties come seeking for votes, often leading to disputes. We stopped entertaining them saying that we have not received anything from you, why should we vote for you?” (Dhablat resident, int19)

Despite the lack of long-term government support for those affected by environmental change, respondents did not highlight resistance or lobbying for government support. In West Bengal there is a documented implicit government threat of violence shaped by years of political instability that arguably limits the extent to which locals resist government action and inaction, irrespective of political party. State sanctioned police violence in response to Nandigram and Singur protests are relatively recent events and likely colours people’s views on resisting state action and inaction. The extreme violence of the Marichjapi resettlement 1979 in which around 1000 Bangladeshi refugees were killed by state sanctioned police for informally resettling in the Sundarbans would also colour decisions to resist government decisions associated with land tenure (Chowdhury, 2011). The threat of violence is a classic mechanism of power by government, where even an implicit threat of coercion can be highly effective in preventing resistance and disempowers communities already at the margins of political interest and attention.

7. Conclusions

When faced with unacceptable risks to whole communities and populations, governments engage in significant interventions to help relocate communities. But with diverse elements of accountability and perceptions of risk, responses are uneven and patchy. Much of the focus of research to date has been on the processes of consultation and engagement, the human rights aspects of relocation and the need to avoid long term harm and disruption to those being relocated. Yet the examples of relocation may be hiding myriad situations where relocation is equally necessary and yet not occurring. Hence, we have focussed here on explaining some of the conditions under which relocation occurs, the causes of inaction, and the likely conditions for both action and inaction. The framework of planned relocation action inaction suggested here demonstrates a range of institutional incentives and disincentives that shape how governments consider and address environmental displacement.

In the case of West Bengal, government action and inaction exists in parallel and relocation planning is piecemeal. Rather than holding a single consistent resettlement policy, the example of Sagar Block demonstrates uneven government responses over time and space, where relocation inaction is an expression of state interest and power. The lack of institutional arrangements to plan for displacement and relocation in the state of West Bengal allow for this inaction to occur. But the data also show that inaction is a product of risk aversion within the decision-making calculus, given historical experience of failure and current political and electoral realities. In the absence of defined roles and responsibilities in managing displacement there is a lack of state accountability, with no guidance in how to evaluate state action and inaction related to environmental displacement.

The evidence from these cases in Sagar Block demonstrate the range of possible pathways, even in circumstances where the need for assistance for relocation or in situ adaptation are well established and demanded by residents. Both action and inaction are described in these cases. The cases confirm the pathways suggested a priori in the conceptual model in Fig. 1. If they are repeated across the world in places where there is a demand for relocation initiatives, this may have significant implications. Are the findings able to be generalised? The issue of planned relocation in West Bengal is, we suggest, representative of many areas of coastal lowlands in both environmental and political characteristics. First, coastal lowlands globally are facing risks associated with increased rates of erosion, periodic flooding, salinization, and potentially permanent inundation. Neumann et al., (2015) estimate significant growth in coastal populations at risk of inundation. And deltas everywhere, starved of sediment by upstream damming over the past century, are observing negative consequences of subsidence, erosion, and salinization, affecting settlements and populations (Tessler et al., 2015). Second, the West Bengal example shares social and political characteristics of coastal regions world-wide that are facing such threats: these include ongoing populations shifts away from marginal areas to urban areas for economic reasons, and the realisation of the limits of government action to deliberately plan settlement locations (McDowell (2013) de Sherbinin et al., 2011). Hence the West Bengal examples share common characteristics across potentially many regions of the world.

The findings suggest that adaptation to increasing risk cannot guarantee that actions that require migration will be costless or painless. Rather there may be a significant adaptation deficit, with shortage of incentives in political systems to act in response to demand from vulnerable populations, and significant time lags even when accountability and resources are in place (cf. Repetto 2009; Adger and Barnett, 2009).

The model proposed here, and exemplified in the case of West Bengal, demonstrates that governments choose to intervene or not intervene: both outcomes are present and often co-exist in parallel in uneven spaces of risk. Theory and evidence suggest that government

inaction is likely to induce discrete migration by individuals and in-situ adaptation responses based on individual adaptive capacity and communities' inherent ability and capabilities. Hence focusing on the practice of relocation, as dominates this research field, overlooks the consequences of inaction on those populations left behind in vulnerable localities. This has profound socioeconomic implications for those with limited capacity who are at risk of permanent displacement or who are vulnerable to becoming trapped populations. With projections of increasing exposure to risk, for example in low-lying coastal areas globally, the consequences of inaction need to be recognized as it becomes increasingly less tenable.

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